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ABSTRACT

This learning unit on stores control is one in the Choice Series, a self-learning development program for supervisors. The purpose of the approximately eight-hour-long unit is to enable the supervisor to design and organize the layout of a store for maximum efficiency, understand the types of documentation associated with the movement of goods throughout the stores and the workplace, appreciate the benefits to oneself and the workplace as a whole of an effective system of stores control, and understand some techniques used to control stock levels and take steps necessary to prevent losses by wastage and pilferage. An introduction provides an overview of the unit and lists unit objectives. Parts A through D contain informative material, activities and answer keys, self-checks and answer keys, and a summary. Topics include organizing a store, documentation, keeping everything moving, and keeping control. Part E contains performance checks--an end check to be completed alone, a tutor check, and a work-based project. Part F consists of a brief unit review, extensions (print sources of additional information, such as units or sections in books), and a list of references. (YLB)

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An Open Tech Project

SUPERVISING

TECHNICAL ASPECTS OF SUPERVISION

41: Stores Control

U.S. DEPARTMENT OF EDUCATION
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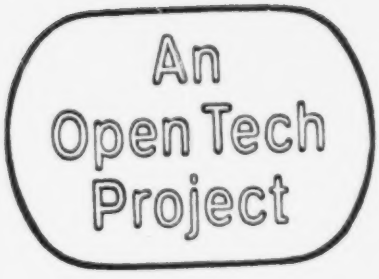
41: STORES CONTROL

David Austin



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David Austin
Stores Control (Number 41 in the CHOICE SERIES of learning units)

Series Editor: Diana Thomas
Northern Regional Management Centre.

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WORKING GUIDE TO THIS UNIT IN YOUR DEVELOPMENT PROGRAMME

This Unit is now your personal property - it's not for handing back to your training officer or to a tutor. It is your working book.

The Contents will increase in value to you each time you write on one of its pages. This is a working text for your personal notes - without notes its value is limited.

Qualifications forget about certificates and diplomas - you don't need them for this programme. What you do need is the wish:-

* to do your job better
* for personal development

Your study time is really up to you - we guess you will need about 8 hours in total. But it's your time - spend as long as you like.

How am I doing? you can judge for yourself by checking out how well you cope with the tasks we call Activities and Self Checks which occur throughout the unit. You can also get the Tutor Check and/or the Work Based Project to your tutor for an unbiased view of your progress.

Work Pace it's really up to you and depends on your interest. However, if you do well on the Activities and Self Checks, you could afford to speed up a little. Of course, if you don't do as well as you expect then you could slow down a little or flick back into the unit for a quick review of the more difficult ideas.

When in doubt - ask or seek help from:

* your family and friends
* colleagues at work
* your company training staff
* other open learners
* your tutor, by phone, by a visit to your support centre or by dropping your tutor a line through the post.

Don't worry if what you learn doesn't seem to be of use to you now, remember that times change - it may be useful one day. Anyway, just knowing more improves personal confidence.

So now make a start:-

41: STORES CONTROL by David Austin

ABOUT THIS UNIT

In most workplaces the task of maintaining control of the many thousands of items of raw-materials, supplies, parts and finished goods is, to say the least, difficult.

An efficient flow of materials is essential to an efficient workplace and any shortcomings in the operation of the stores can have disastrous effects on all other aspects of the company. Similarly, providing an effective service to the customer depends upon an efficient flow of finished goods from the workplace.

Probably, as a supervisor, you have one or both of these responsibilities:

* responsibility for directly running any of the company stores

* responsibility for making use of stores, to ensure a smooth flow of materials and parts in your own department.

This unit should help to do both more efficiently.

IN THIS UNIT WE WILL:

* Examine some ways to lay out a store for the maximum efficiency of both the flow of materials and prevention of losses.

* Examine a typical system for recording stock movements and for reporting stock levels in terms of quantity and value

* Establish the benefits of efficient organisation of stores.

* Examine some of the techniques used to control stock levels and to minimise losses by wastage or pilferage.

AUDIO TAPE Side 1

Before you continue through this unit, you should listen to side 1 of the audio tape that accompanies this unit. You will find it useful if you refer to the objectives shown below whilst you listen to the tape. You may wish to make the objectives clearer to yourself by making a note or two on the page as you listen.

OBJECTIVES

When you have worked through this unit you will be BETTER ABLE to:

* design and organise the layout of a store for maximum efficiency

* understand the types of documentation associated with the movement of goods throughout the stores and throughout the workplace

* appreciate the benefits to yourself, as supervisor, and to the workplace as a whole of an effective system of stores control

* Understand some of the techniques used to control stock levels throughout the workplace and take the steps necessary to prevent losses by wastage and pilferage.

PART A ORGANISING A STORE

1 Introduction

In Part A we shall be looking at the basic "Housekeeping" which is a very important aspect of Stores records. The most accurate records ever kept would be no use ina an untidy store!

We will consider the most efficient way to lay out a store so that we know exactly what is in the stores and where everything is. As you will see, it is mostly a combination of common sense and a tidy mind.

Whether we are dealing with raw materials, spare parts, components or finished goods waiting to be sold, the principles are the same:

* KNOW WHAT YOU'VE GOT

* KNOW WHERE EVERYTHING IS.

2 Shelves and bins

One of the secrets of good stores control is making the best use of your available space.

ACTIVITY 1
Time guide
1 min

Every room, whatever it's used for, has three dimensions. Jot down what they are

* _____

* _____

* _____

The three dimensions are:

length
width
height

Most rooms, particularly living rooms and offices, only use about a quarter of the available space. In many cases we use even less, but this is because we need room to move about in.

We cover a lot of floor space with tables and chairs and all the other things necessary for comfortable living but the room above the furniture is empty, right up to the ceiling.

Obviously we don't want our homes full to the ceiling with furniture, but there is no reason why we should not make better use of this space at work.

ACTIVITY 2
Time guide
1 min

How can we make use of the available space between the top of the furniture and the ceiling? Jot down one suggestion.

* _____

It is quite common for us to build shelves in our homes or workshops right up to the ceiling, so we will take this a stage further and organise our store so as to make maximum use of ALL the available space.

So the first thing to consider is shelves.

2.1 Shelves

All stores, no matter what they contain, are made up of 'shelves'. Although they might not always look like the shelves we have at home or in the garden shed, we still refer to any place where we can place goods as a 'shelf'.

Because of the immense variety of items that need to be kept in company stores, the shape and size of shelves will also vary considerably from one type of store to another. Some must be very long, but may not be very wide, for storing lengths of steel or lengths of wood; others may need to be wide or deep without being long, for instance to store rolled carpets.

ACTIVITY 3
Time guide
10 mins

Think about some of the items that need to be stored at your place of work.

Choose THREE different items and write down against each which would be the most suitable size of shelf on which to keep a number of each:

* item ..... Shelf type .....
* item ..... Shelf type .....
* item ..... Shelf type .....

You probably thought of items which were different sizes and shapes and which needed either long and narrow shelves, short and wide shelves, or even some larger items that needed a shelf that was both long and wide.

Go into any part of your company store (with the storekeeper's permission, of course) and see whether you were right about each of the items you chose.

ACTIVITY 4
Time guide
2 mins

Suppose you had to store some goods which were much heavier than anything else you kept in stock. Where would you put them?

* _____

Perhaps you said something like 'low down' or 'at the bottom' or, most accurately, 'on the floor'. For the purpose of stores records, the floor is also classed as a shelf.

If you work for somebody like a car dealer or manufacturer or for a timber merchant, you will already have realised something that may take the rest of us by surprise - not all stores are indoors. There are many items which are stored in the open air: completed motor cars awaiting delivery to the dealers are usually stored outside on the ground. But, for the purpose of stores records, they will be considered to be "on a shelf".

So, as you can see, almost anything can do as a shelf as long as it is suitable to keep the type of item required. However, the most common type of shelf is a multi-tiered rack holding perhaps five or six shelves one above the other and secured to the floor and ceiling for safety and security. These sets of shelves can be arranged in neat rows to make full use of all available space.

We will come back later to look a little more closely at shelves but first let's consider the second important part of any store - bins.

2.2 Bins

The term 'BIN' is used in stores control to refer to a particular part of a shelf. You could think of it as an "address" within the store. Instead of saying that a particular part is 'down in the bottom left-hand corner on the third shelf of the second row', that particular location would have a unique reference number which, once everyone got accustomed to the numbering system, would leave no doubt as to the location of the part we are looking for.

What does a bin look like?

In many cases the 'BIN' will actually be a bin. It is quite common for large quantities of small items, such as nuts and bolts, to be kept in a metal or plastic container which looks very like a domestic bin.

Similarly the containers for fluids etc which are kept in stock are referred to as 'bins', by many storekeepers, whereas the more usual name might be 'silo', 'tank' or something similar.

Some items are too large to be kept in bins, or any other container for that matter - such as the motor cars awaiting delivery, as we mentioned earlier. There will, however, be a specific location, which is known to the storekeepers, in which a precise number of cars can be kept.

A car-park is only capable of holding a particular number of cars and the attendant will know exactly how many cars can be parked in each row or group of bays.

This same principle is used by storekeepers to arrange materials and parts in bins on shelves.

ACTIVITY 5
Time guide
5 mins

Go to one of your own company stores and enquire as to the terms used, by those working in the store, for a particular location. They may use a different word from 'bin'; if so, then you need to substitute your word everytime that I use the word bin.

SELF CHECK 1
Time guide
1 min

Complete the following statement with suitable words.

A rule-of-thumb guide to stores organisation would be that:

a store consists of a number of _____

which each comprises a number of _____.

The answer to this self check is here in the following words so you will have to check your answers carefully. A store consists of a number of shelves each of which comprises a number of bins.

The bin becomes more important when we start to look at the documentation in PART B, so make sure that you've checked out what is meant by 'bins' in your workplace.

Of course, bins come in all shapes and sizes: they are made to suit whatever has to be kept in them. However, for the purpose of stores records and stores control, we will refer to them as a single unit.

Whatever the bins themselves are like, what we are really concerned about is what they contain - the materials, supplies or parts.

These may be made up of thousands of small units so we may, for convenience, keep records of 'bins-full' of items.

So we can say that:

A BIN is used to refer to the CONTENTS, rather than the container.

A BIN is a guide to the location of particular items in the store - the 'address' of those items.

3 Everything to hand

Read the short case incident that follows, which is concerned with three people's view of a similar situation.

George is the chief storekeeper in the parts store of an engineering works.

Brian is a production supervisor, responsible for an assembly line, and needs to ensure that nothing holds up the smooth running of his section.

Jimmy is the stores assistant, understudy to George.

----- -----

Brian "Now then, Jimmy, can you get me 3 gross 15 cm eyed expansion bolts. Here's the requisition note."

Jimmy "OK. Now what's the part-number? (looking at the blue document which Brian has just handed him). "I'll need the part-number to look-up the bin number."

Brian "Oh, I don't know. Just ask old George, he knows where everything is."

Jimmy "George is away having his break at the moment. He should be back in ten minutes."

Brian "I can't afford to wait that long. You should know where they are kept, we ask for them regularly enough."

Jimmy "You can't expect me to know where everything is, I've only been working here since I left school 8 months ago. And anyway, there are thousands of different items in this store - no-one could remember where everything is."

George (returning early from his break)

"Now then Brian, what's up?"

Brian "Young Jimmy here doesn't know where the expansion bolts are and I need 3 gross in a hurry."

George "Now let me see, I think they are down at the far end, on the third shelf up at the back. You will have to get the ladder out again Jimmy and move those boxes of toilet rolls out of the way."

Jimmy "Toilet rolls? What are they doing beside the bolts? They should be in the welfare stores, not here. Anyway, this will be the third time this week I've had to shift boxes out of the way to get some urgent parts. Why don't we keep all the urgent stuff near the front where we can get our hands on it quickly and keep the older stock that doesn't get asked for much at the back?"

George "So it should be lad, but we don't know what is urgent and what is not. One week there will be a demand for one thing, the next week it will be something else. Anyway, check out the stock-list before you go down to the far end, to make sure we have got what Brian wants."

Jimmy (looking at a sheaf of dirty sheets of paper)

According to this, part number d/54/f, is in bin g3/12, that's row g, shelf 3, and bin 12; and there are 5 gross in stock. I'll only be a couple of minutes."

Brian "The lad is right George. It would help a lot if all the urgent parts were kept close at hand."

George "OK, but who is going to decide what is urgent and what isn't? As you know, when one order is completed, the next one will probably need different urgent parts again. I'm not a mind-reader."

Jimmy (returning)

Sorry, Brian, there were only 2 gross left. We'll have to get an order out for some more. The stock-list must be out of date.

George "Well, it takes the clerks in the office a few days to catch up with all the changes and we only get a fresh stock-list once a week. It's not our fault."

Brian "This is just not good enough. If this order is held up because the stores are inefficient, heads will roll. Surely you knew we would need a lot of bolts for this job. Why didn't you make sure you had enough?"

George "I've told you, we are not mind-readers. We keep stock levels up to a fixed level. If there's a sudden demand for a particular part, we are bound to run short before we can get some more in. If we held too many, they wouldn't get used. They would take up valuable shelf space, to say nothing of wasting the company's money."

Jimmy "Surely there must be a compromise. There should be some way we can prevent this sort of thing happening and save my poor arms and legs climbing up ladders and moving boxes everytime someone wants a dozen paperclips."

George "Now then Jimmy, less of your lip. But I agree. I've been looking after these stores for 15 years now. In the old days I knew exactly where everything was, but of course there was only a few hundred different items then. Now there must be more than 5 thousand and production methods have improved a lot since them. We must see what we can do to improve things."

There are several lessons to be learnt from this conversation. Each of the three has a point to make and can benefit from each other's point of view.

ACTIVITY 6
Time guide
7 mins

What would you consider were the most important things said about how stores should be run, mentioned by:

George, the chief storekeeper?

Brian, the production supervisor?

Jimmy, the stores assistant?

Write down in a few words what you think are the most important points and then compare what you have written with the suggestions made below:

George _____

_____

Brian _____

_____

Jimmy _____

_____

_____

Although there are more than one point which each of the three have made, I think the following are probably the most important from the point of view of the efficiency of the whole workplace:

* George would like to be given some warning in advance of the likely demand for the various items most often required, so that he can make sure that the parts are available and ready for issue.

* Brian needs to be sure that any parts or materials he needs to keep his production lines moving are ready in the stores exactly when he needs them, and that the people in the stores can put their hands on the goods with the minimum of delay.

* Jimmy would like to see the parts which are most often needed being kept close at hand and not at the furthest end of the store and on the top of the highest shelf.

Between them they have identified

THREE IMPORTANT NEEDS IN ANY STORES SYSTEM:

* Good planning - cooperation between stores controllers, departments using the stores and departments scheduling what work is to be done.

* Efficient records - everyone concerned with materials and parts must be able to know immediately what is available and where it is and, if there has been a shortage, how long it will be before stocks are available.

* Everything to hand - people working in stores must be able to find things with minimum time and effort.

The problem could largely have been avoided if up-to-date records, saying where the bolts were and how many were in stock, had been kept; if the bins and shelves were laid out to their best advantage and if the storekeeper had had advice on what parts were going to be in demand in the near future.

This last piece of information would also help him to lay out his stores in the most efficient way so that things which are rarely needed are kept at the far end and things which are in demand are immediately to hand.

SELF CHECK 2
Time guide
5 mins

Respond to each statement by writing TRUE or FALSE in the space provided.

a) The storekeepers must know where every item of stock is kept in the stores for which they are responsible. _____

b) The storekeepers are expected to know in advance which parts or materials are going to be required, so that they can get them ready. _____

c) An essential aspect of good storekeeping is properly labelled bins and shelves. _____

d) Production must be kept going at all costs even if this means inconvenience to the storekeepers. _____

The answer to this self check is here in the following words so you will have to check your answers carefully. a) Although we cannot expect the storekeepers to remember exactly where every item is kept, there must be a fast and effective way to locate any item required. It is the responsibility of EVERYONE to ensure that this information is kept up to date, so this statement is true. b) Storekeepers are not mind-readers and unless they get plenty of advance warning they cannot be expected to predict the changing demand patterns of a busy production unit so this statement is false. c) This is true. Unless the bins and shelves are clearly and accurately identified by well-printed labels, the work of those employed in the stores can become frustrating and time-consuming in constantly searching through badly or unmarked bins for materials or parts. d) The stores are a vital service to the production function, but it is production which is the more important activity so this statement is true. However an efficient stores system can be invaluable in ensuring a smooth service in the supply of necessary materials and parts.

Having things easily to hand is largely a matter of common sense. Let's look at two more common sense points which affect the efficient layout of stores.

* The space between the shelves, that is the width of the access areas.

* The height of the shelves from the ground.

In larger stores, we do not expect the storekeeper or his staff to walk everywhere, or for them to carry everything in their hands. Even in small workplaces, some of the parts kept in the store can be very heavy.

It is quite common for some kind of MATERIALS HANDLING EQUIPMENT to be used, eg trolleys or fork-lift trucks.

For larger, heavier items, some form of lifting apparatus or crane equipment will probably be needed.

ACTIVITY 7
Time guide
2 mins

Suppose you are laying out a store where fork-lift trucks will be used. Do the lanes between shelves need to be

a) slightly wider than the fork-lift truck? ☐

b) as wide as two fork-lift trucks? ☐

c) wide enough for fork-lift trucks to turn round? ☐

Tick whichever you think is the most correct answer.

In order that these pieces of equipment can operate to the best of their capability, we have to make sure that the lanes between the rows of shelves are wide enough for the trolleys and trucks to move freely AND turn round!

Similarly the height of the shelves must be suitable for the fork-lift trucks to reach without causing a danger due to overbalancing.

Goods which are kept on the top shelves should be the smaller, lighter items which can be reached by means of ladders.

Any large, heavy items, which require that lifting gear be employed, should not be stored on high shelves where there may be a danger of collapse. Far better to keep these items close to the doors or loading bays so that the work of the cranes will not hamper other normal issues.

Finally, do you remember that George tells Jimmy that, to get at the bolts he wants, he'll have to move some boxes of toilet rolls?

In any well-organised store, materials for different aspects of the organisation's work will be stored separately. So, for instance, there shouldn't be any question of paper for packing, office stationery and toilet rolls being anywhere near each other.

The final word in this section is a rule which everyone concerned with stores should bear in mind:

KEEP EVERYTHING TIDY

CLEAR UP AT REGULAR INTERVALS (at least once a day!)

EXTENSIONS 1 and 2
page 69

Problems of storage and ways of solving them are dealt with in greater depth in the books suggested in these extensions.

4 First-in, First-out

It is very important to make sure that all the goods kept in the stores are in good condition, that they don't become rusty or damaged in any way.

One way to do this is to use the OLDEST goods before the NEWEST.

When we say 'oldest' we do not mean goods that are out-of-date or have deteriorated - (these should not be taking up valuable space!), but the ones which have been in stock the longest.

By this method we can be sure that all the goods being used in the factory are in the best possible condition.

This technique is referred to as:

FIRST-IN, FIRST-OUT.

ie the first goods received and placed in store should be the first to be issued.

This idea is sometimes referred to by its initial letters - FIFO.

This leads to a 'rotation' of stock which avoids the possibility of any items being made useless because of damage, either by rust, dampness or any other reason caused by leaving them lying too long.

ACTIVITY 8
Time guide
5 mins

Jot down TWO other good reasons why it is advisable to use the oldest stock before the newer.

* _____

* _____

Well, two possible reasons might be:

* To make room for newer items being delivered and to make sure that all the goods in the store are of the latest quality.

* So that the older items do not get lost or hidden by the newer items and be in danger of damage.

Of course, there will be occasions when it is necessary to use newer stock before old, due to the fact that there might be small differences in the newer stocks which affect how it can be used.

However, any older goods which are not being used should be moved, otherwise they might well end up never being used and taking up valuable space.

Perhaps the most important reason for First-in, First-out, however, is to do with costs.

Now only should all goods in the store be 'recent' but also the value of each item should be as near to the current value as possible.

The only way to achieve this is for the oldest goods, which were at the oldest prices, to be issued first, so that the goods left in stock are the newest items, which carry the most recent price.

By this method we can be sure that all stocks are priced at the most up-to-date value. This is essential if we are going to prepare accurate up-to-date costings.

This principle of First-in, First-out will be met later in PART B, when we shall see how the stock records are kept.

5 Special Conditions

One other consideration which may affect how stores are laid out is the nature of the goods being stored.

* Perishable goods may have to be kept at a low temperature

* Very valuable materials such as gold may have to be stored in a maximum security area

* Potentially dangerous items such as canisters of liquid gas may have to be stored outside or against an outside wall.

Obviously I can't cover all the items in your workplace which might need special storage conditions but the stores supervisor would need to know about them and special storage requirements would have to be taken into account in the design of the stores layout.

SELF CHECK 3
Time guide
5 mins

Respond by completing each sentence with a suitable word or words.

a) An individual section of a shelf or a store where goods are kept is called a _____.

b) Plenty of space should be left between rows or shelves to accommodate _____.

c) Heavy items should be kept near _____ wherever possible.

d) Issuing older items before newer items to ensure continuity is known as _____.

The answer to this self check is here in the following words so you will have to check your answers carefully. a) We've referred to these individual sections of shelves as bins. The name may vary in your workplace - it's worth checking to find out. b) You may have said something like 'trolley', 'fork-lift trucks', 'ladders', 'cranes'. They are all materials handling equipment. c) Heavy items should be kept near entrances and near cranes to minimise the movement of handling equipment which might disrupt more usual issues. d) This is known as First-in, First-out.

6 Summary

Stores comprise SHELVES and BINS.

An efficient stores system should tell you immediately:

* where everything is
* exactly what is in stock
* how long it will take for items to be replaced

A well laid-out store:

* makes the best use of all available space
* protects goods against deterioration, fire and theft
* places materials and parts most frequently used in bins nearest the point of issue
* leaves plenty of room for handling equipment between shelves
* places heavy items low down, near entrances and cranes
* ensures that earliest items received are issued first
* allows for materials which need special storage conditions.

PART B DOCUMENTATION

1 Introduction

We saw in Part A how important it is to have a well organised store. However, it would be quite impossible for anyone to keep track of all the contents without some written records to help.

In this section, we will examine the most common and essential records that need to be kept for any type of store, large or small.

Of course, each company will probably have its own particular design for the various types of document which we will describe; so we can only deal with the information which should appear on the documents. It is left to each company to design its own special forms.

Basically there are only THREE types of record needed:

1 To record goods and parts etc coming IN.

2 To record goods and parts etc going OUT.

3 To record goods and parts etc LEFT IN STOCK.

So we will deal with each of these in turn.

In many workplaces, stores records are now computerised and you, or anybody else concerned with stores information, are as likely to be working at a visual display unit as filling in stores records by hand.

However, no matter how sophisticated the system, it is only as good as the accuracy of the information fed into it and will work on the basic principles we're going to look at now.

2 Receiving goods

There are TWO different transactions involved in recording the receipt of goods and it is very important that we can distinguish between the two.

* Taking in NEW goods, just delivered by our Supplier.

* Taking back OLD goods, which had been issued to the production or service departments, and which are now being returned for any reason.

Both transactions relate to the same activity - receiving goods - but for stores records purposes it is essential that the two transactions do not get confused.

Can you think why?

ACTIVITY 9
Time guide
5 mins

Write down ONE possible reason why it is essential to discriminate between NEW goods coming into the store and goods which had previously been issued being returned.

*

As we shall see, NEW goods need to be checked against orders and will need to be notified to the Purchasing and Accounting Departments so that they can be paid for. RETURNS have already been booked into the stores once and booked out again. The fact that they have been returned must be confirmed with the product and service department and arrangements made with the costing section to adjust any changes which have been made.

In either case however we MUST:

make a RECORD of the TRANSACTION.

The document or form which we use is called:

A GOODS RECEIVED NOTE (or GRN)

- for the receipt of NEW goods.

or A GOODS RETURNED NOTE (or Debit-note)

- for goods returned after issue.

The information which must appear on these documents must be sufficient for EVERYBODY concerned to understand the full details of the transaction.

Although each company will have its own particular design for its Goods Received Notes and Returns notes, there are a number of pieces of information which MUST ALWAYS be shown:

Firstly the GOODS RECEIVED NOTE:

ACTIVITY 10
Time guide
3 mins

Jot down four pieces of information which you think it is important should appear on a Goods Received Note so that each department can get the information it needs.

*

*

*

*

The words 'GOODS RECEIVED NOTE' in a prominent position, followed by the following:

1 A SERIAL number, which identifies each Goods Received Note

2 The DATE of the receipt

3 The QUANTITY of EACH ITEM received

4 The DESCRIPTION of EACH ITEM received

5 A CODE NUMBER for EACH ITEM received

6 The ORDER NUMBER relating to the delivery

7 The NAME of the SUPPLIER

8 The SIGNATURE of the PERSON who counts and checks the delivery.

In addition to these pieces of information which are MOST IMPORTANT, there could also be additional items such as:

9 The METHOD of DELIVERY (eg rail, van, post etc)

10 The NAME of the organisation who DELIVERED the goods

11 The exact TIME of the delivery.

12 CONDITION of GOODS when RECEIVED.

Here is an example of a Goods Received Note which you might like to compare with whatever is used in your workplace. There is likely to be some variation in documentation between one workplace and another.

GOODS RECEIVED NOTE

ACME ENGINEERING CO LTD
NORTHERN DIVISION
PREMIER WORKS

Date	No
	0074002

Supplier	Carrier	Order No

Quantity	Description	Reference No

For office use		Counted and Checked by:
Ledger No	Bin No	

GOODS RECEIVED NOTE

ACTIVITY 11
Time guide
3 mins

When goods are delivered to be used by the company in whatever goods or service they provide, they must already have been ordered and they have still to be paid for. How many copies of the Goods Received Note do you think the company would need to deal with the delivery?

* _____

_____

Most companies would need at least three copies.

One copy is kept by the STORES SUPERVISOR
One copy is sent to the PURCHASING Department
One copy will be sent to the ACCOUNTS Department

Some companies will send an extra copy to the PRODUCTION Department to let them know that important materials they were waiting for have now arrived.

The information which must appear on a GOODS RECEIVED NOTE (or Debit-note) is similar in many ways but must show certain other information.

ACTIVITY 12
Time guide
2 mins

What information do you think should appear on a Goods Returned Note which does not appear on a Goods Received Note?

* _____

_____

_____

As well as a serial number and description of the items returned and how many there were, I would include:

* A CODE NUMBER for EACH ITEM returned
* The DEPARTMENT returning the goods
* The JOB NUMBER (or other reference) for which the goods were originally issued
* The SIGNATURE of the person in the store who counted and checked the goods being returned
* The SIGNATURE of the SUPERVISOR of the Production or Service Department which returned the goods.

Here is an example of a typical GOODS RETURNED NOTE.

GOODS RETURNED TO STORE

ACME ENGINEERING CO LTD
NORTHERN DIVISION
PREMIER WORKS

Date	No
	05272

From Department	Date of issue	GRN Reference

Job Number	Supplier	Order Number

Quantity	Description	Reference No

Reason for Return	Signature of Authorising Officer
For office use	Counted and Checked by:

Ledger No	Bin No

GOODS RETURNED TO STORE NOTE

You would normally have at least three copies of a Goods Returned Note.

ACTIVITY 13
Time guide
2 mins

Who, or which department, do you think will need a copy of the Goods Returned Note?

*

One copy is kept by the Stores Supervisor as a record of what is now in stock.

One copy is sent to the DEPARTMENT who returned the goods to confirm that they have been returned to stores.

One copy is sent to the COSTING DEPARTMENT so that they can adjust any costs charged to the department concerned.

ACTIVITY 14
Time guide
10 mins

Here are some of the items of information on Goods Received Notes and Goods Returned Notes.

Briefly jot down one reason why you think each of them may be important. (It may help if you think about things which can go wrong!)

Serial number _____

_____

Delivery date _____

_____

Quantity of each item _____

_____

Description of each set of items _____

_____

Code Number for each item _____

_____

Order number _____

_____

Name of supplier _____

_____

Signature of person responsible for checking in goods _____

_____

_____

Here are what seem to me to be the main reasons for needing these items of information.

* Serial Number

Because every delivery must be identified and distinguished from every other receipt, the only way we can be sure is for each GOODS RECEIVED NOTE to have a DIFFERENT number which is never used for any other receipt. In this way anyone in the company can trace any particular delivery.

* Delivery Date

There may be several deliveries of similar materials on different days. Only by making sure that the correct date is on every document. (In some cases, even the TIME of the delivery can be important: there could be more than one delivery on the same day!).

* Quantity of each item

It is very common for a delivery to be received which is made up of more than one type of material or part, so each part of the delivery must be separately checked. Shortages or surpluses must be noted carefully, because the accuracy of all the stores records depends upon correctly counting all movements, either IN or OUT.

* Description of each set of items

Many materials and parts are so similar that unless we are very careful about the precise description, it would be very easy for mistakes to occur and misunderstandings could cause problems, both in the stores and later, if the wrong materials or parts were issued to the factory.

* Code Number for each item

The problems which can arise as a result of poor or incorrect descriptions of goods can be solved by giving each type of material or part a unique CODE number.

In many workplaces the code number is used in preference to the description in order to avoid confusion caused by vague descriptions.

The Code Number can also be used to distinguish between different kinds of stock. The first digit of the code number might relate to the type of stores for example.

RAW MATERIALS STORES
FINISHED GOODS STORES
MACHINERY SPARES
CONSUMABLE TOOLS

Coding systems vary considerably from one workplace to another, so it is impossible to be very precise. However, if everyone gets used to using the code numbers when talking about stores records, it can prove very useful in avoiding mistakes, and in helping everyone to keep track of items either being received, or being issued from the various stores.

* Order Number

The Purchasing Department will need this to check that all the order has been received. Sometimes an order is made up of several deliveries. Nor will the Accounts Department want to authorise payment to the Supplier unless it can be sure that the order has been fully received: it can only do this by matching up each Goods Received Note with the original order.

* Name of the Supplier

Often there are queries about the quantity or quality of the items received and we need to know who supplied the goods. This is also the reason it may be important to know who delivered the goods and how. The original supplier may deny sending goods which arrive damaged and in that case you have to take it up with whoever delivered them.

* Signature of the person responsible for checking in the goods

This should be the supervisor or somebody to whom authority has been given. As supervisor you need to know exactly what goods are being moved in and out of stores as all queries will certainly come back to you.

SELF CHECK 4 Respond by completing each sentence with a suitable word or words.
Time guide
5 mins

a) Each goods received note can be identified by its _____.

b) In order to avoid confusion over the description of materials or parts, a _____ should also be used.

c) Every goods received note should be signed by the _____.

d) Every goods returned note should be signed by _____ and _____.

e) One copy of every document should be kept in the _____.

f) Another name for a goods returned note is a _____.

The answer to this self check is here in the following words so you will have to check your answers carefully. a) The only thing that is unique about every goods received note is its serial number and it's that which you use to identify it. b) Many parts look and sound very similar or may be described too vaguely to be sure that you've got the right thing. A reference number or code number solves this problem. c) Every goods received note should be signed by the stores supervisor (or by somebody whom he has authorised to do so). d) Goods returned notes should be signed by the stores supervisor and the supervisor of the department returning the items. e) One copy of every document should be kept in the stores. f) Goods returned notes are also known as debit notes.

ACTIVITY 15
Time guide
3 mins

Decide whether the following statements are TRUE or FALSE.

a) You only need goods received notes for items delivered by haulage companies directly to the stores. TRUE/FALSE

b) Items received by post don't need to be documented. TRUE/FALSE

c) Items supplied direct to departments other than stores don't need goods received notes. TRUE/FALSE

None of these statements is true.

It is essential that every receipt of goods is covered by either a GOODS RECEIVED NOTE or a GOODS RETURNED NOTE; this includes goods received by post or any other method.

Sometimes, materials are delivered directly to the factory or site, without first going into the store. It is the responsibility of the stores supervisor to make sure that, even if he never sees the goods because they have been taken directly to a production or service department, there is a proper goods received note made out for them. Only in this way can the company keep track of all its materials and parts. So:

EVERY RECEIPT OF GOODS MUST BE COVERED BY A DOCUMENT SHOWING FULL DETAILS.

3 Issuing goods

Having dealt with the documentation you need for receiving goods, let's have a look at what should happen when goods are issued.

We said that there are two transactions involved in receiving goods and it's important to distinguish between them. Similarly, when you issue goods from stores you will be doing so for one of two quite different reasons.

ACTIVITY 16
Time guide
2 mins

Jot down what you think are the two circumstances in which you might be issuing goods from stores.

* _____

* _____

I hope we can agree that you would either:

* issue goods to the department who is asking for them

or

* return goods to the supplier because they are faulty, damaged or unsuitable.

It's important to record what goods have been issued so that the company knows exactly how much is being used in providing the goods or services which are its business.

ACTIVITY 17
Time guide
2 mins

Sadly, there's one more reason why it's important to keep a record of what is issued from stores. Jot down what you think that is.

* _____

_____

Being able to trace issues means that you have a means of preventing pilferage or theft which costs many companies thousands of pounds a year. Strictly-kept records of issues should cut this down.

ACTIVITY 18
Time guide
2 mins

Bearing in mind what we said about the documents needed for receiving goods:

a goods received note
and
a goods returned note,

jot down what you think are the two documents you would need to deal with issuing goods from stores.

* _____

* _____

You need something which says exactly what goods have been asked for by a particular department. This is called the

MATERIALS REQUISITION

You also need a document to record goods which are sent back to the supplier. This is called the

CREDIT NOTE or RETURNS NOTE

Calling this a RETURNS NOTE can be a bit confusing. You might reasonably wonder whether it means 'returned to stores' or 'returned to supplier'! In practice, most companies get round this possible confusion by designing sets of forms which look completely different from each other so, once they are trained, people are in no doubt as to which is which.

ACTIVITY 19
Time guide
5 mins

A materials requisition must contain certain information. Bearing in mind what we've already said about stores documents, jot down five items of information which you think should appear on a materials requisition form.

* _____
* _____
* _____
* _____
* _____

Here are the items of information I would include on a materials requisition form. You might also well have made the point that the form should clearly say MATERIALS REQUISITION NOTE so that people are in no doubt that they are using the right form for the job.

* serial number - to identify each individual requisition
* date
* quantity of each item required
* description of each type of item required
* code or reference number for each type of item required
* job or batch number for which the goods are required
* name of the department making the requisition
* signature of the supervisor or manager of the department making the requisition

ACTIVITY 20
Time guide
2 mins

You need at least three copies of a materials requisition note.

Jot down at least two of the people or departments who need a copy.

* _____

* _____

You probably thought without any hesitation that the department making the requisition needs a copy and so does the stores supervisor. The other department which needs a copy is costing so that it can calculate the total costs incurred by departments requisitioning goods.

Here's an example of a materials requisition note.

MATERIALS REQUISITION NOTE

ACME ENGINEERING CO LTD
NORTHERN DIVISION
PREMIER WORKS

by Dept.	Job No	Date / Customer Order No	No 744286 / Time

Quantity	Description	Reference No

For office use only

Authorised by:

MATERIALS REQUISITION NOTE

ACTIVITY 21
Time guide
8 mins

We've already said that a returns note is the record kept of goods returned to the supplier because they are unsuitable, faulty or damaged.

Bearing in mind what you now know about stores documentation, jot down ten items of information you would include on a returns note.

* _____
* _____
* _____
* _____
* _____
* _____
* _____
* _____
* _____
* _____

A returns note has got to match up with the original order, goods received note and materials requisition so that any interested department can make sure they have all the information they need, so there's quite a bit of information to include. Perhaps your ten items of information are among these.

* a serial number unique to that particular document
* date of the return
* quantity of each item returned
* description of the items returned
* code or reference number for each type of item returned
* reason for the return
* date of the original delivery
* name of supplier
* serial number of the goods received note
* original order number
* signature of the stores supervisor who authorised the return.

You might also have included the method of return (post, rail, road transport etc) and the name of the company carrying the returned goods. And, as we mentioned before, the title of the form needs to be very clear so that everybody is quite sure what a returns note means.

ACTIVITY 22
Time guide
3 mins

If you return goods, you must have ordered them but, clearly, you don't want to pay for them and you may want to think carefully before using that supplier again.

You will probably need four copies of a returns note. Who or what departments do you think will need a copy?

* _____
* _____
* _____
* _____

As usual, the stores supervisor needs a copy to complete his records. One copy is sent to the supplier to let him know exactly what is being returned and why; one copy goes to the Accounts department so they can make sure the company doesn't pay for the returned goods and one copy goes to the Purchasing department since they raised the order in the first place and may want to reconsider using that supplier.

If you haven't worked in a stores or in a department such as Accounts which deals with the paperwork involved in buying materials and selling goods and services, it may have struck you that there seems to be an awful lot of pieces of paper flying about with multiple copies of everything we mentioned so far.

This may be true but there are two ways in which possible confusion can be avoided. These are:

to colour code documents

to pre-number documents

Colour coding

Companies usually have their documents printed for them and, if they are going to need several copies, they have them printed in sets with each copy in the set being a different colour. Thus you could have a pad of returns notes printed like this:

Top copy - white - Store's copy

1st copy - blue - Supplier's copy

2nd copy - yellow - Accounts' copy

3rd copy - pink - Purchasing's copy

That way, it's immediately clear if you have a copy which should have gone to another department.

ACTIVITY 23
Time guide
2 mins

Colour coding forms ensures that you get the right copy. There is one important thing colour coding will <u>not</u> tell you that pre-numbering documents will.

Jot down what you think that piece of information is.

* _____

If documents are pre-numbered (usually done at the printers) you can tell if any of them are missing and have gone astray. So, if you work in Accounts and you receive returns notes numbered

8016

8017

8019

you know that 8018 has gone astray somewhere and that you should try to trace it.

Documents which are simply colour coded obviously don't provide this information.

Clearly, you don't need a system of colour coding and pre-numbered forms if you have a computerised system but, computerised or manual, we can see that the accuracy of the information is vital to the success of the system.

SELF CHECK 5 Who makes out
Time guide
3 mins

a) a goods received note * _____

b) a materials requisition note * _____

c) a goods returned or debit note * _____

d) a returns note to the supplier? * _____

The answer to this self check is here in the following words so you will need to check out your answers carefully. The stores supervisor makes out a) a goods received note and d) a returns note when goods are sent back from the stores to the supplier. A supervisor in the department using the goods makes out b) a materials requisition note when they need goods from stores and c) a goods returned or debit note when they want to return surplus supplies to stores.

We can summarise that by saying

STORES raise the documentation for RECEIPT of materials

PRODUCTION AND SERVICE DEPARTMENTS raise the documentation for ISSUE of materials

BUT

THE STORES SUPERVISOR IS RESPONSIBLE FOR

* THE ACTUAL PHYSICAL RECEIPT AND ISSUE OF ALL MATERIALS

* THE ACCURACY OF ALL DOCUMENTATION.

SELF CHECK 6 Respond by completing each sentence with a suitable word or words.
Time guide
5 mins

a) A materials requisition note is used to record the _____ of materials.

b) There should be at least _____ copies of each document.

c) We can avoid confusion over each copy by using _____.

d) Goods received notes are prepared by _____ personnel.

e) We can ensure that there are no duplicate documents by having them _____.

The answer to this self check is here in the following words so you will need to check out your answers carefully. a) Materials requisition notes are used to record the issue of materials. b) You need at least three copies of each document. c) Colour coding avoids confusion over where each copy should go. d) Goods received notes are prepared by stores personnel. e) You can make sure you have no duplicate copies or have not lost any if the documents are pre-numbered.

We have now covered all the documents concerned with the receipt and issue of goods to and from the stores and it's important that no materials or parts should enter or leave the stores unless recorded on one of the documents we have described.

Although we have seen how to deal with all movements in and out of the stores, we still have no way of knowing how much we have left in the store (unless someone goes out and looks!).

In order that everyone concerned can have accurate information about exactly what is in the stores at any time, we will need to have some separate records which will not only record goods coming in and going out but, also, record what is still in stock after each transaction.

4 Keeping a Record

In order that anyone can find out quickly exactly what is held in the stores, we need a record that not only records what goes in and what goes out but also keeps a running total of what the current stock level is.

We already have accurate records of everything which comes into the store and everything which goes out of the store.

ACTIVITY 24
Time guide
5 mins

Write down, in the space provided, the document you would use to record the following transactions:

a) 5 drums of machine lubricating oil delivered by the suppliers own van.

* _____

b) Brian, the supervisor of the assembly shop, brings back 12 sub-assemblies which were surplus to his needs. (These had been issued to him the previous week.)

* _____

c) Tom, the supervisor of the maintenance department, requires 5 new drill bits.

* _____

d) George, the stores supervisor, sends back one drum of machine lubricating oil because it was found to be leaking and only half full.

* _____

I hope we can agree that these are the documents you would use:

a) goods received note

b) goods returned to stores note

c) materials requisition note

d) goods returned to supplier note

Now let's see how these documents are used to record stock levels.

You may remember in Part A we introduced the Bin as the location used to store numbers of individual items.

Well, we continue with this record-keeping principle by looking firstly at:

BIN CARDS

A bin card is used to record: the receipts

issues

and current level (balance)

of the goods contained in each individual bin.

There will be one bin card for every bin and it should be kept as close to the bin itself as possible.

Care must be taken to make sure that the bin cards do not get damaged, defaced or lost, otherwise no-one will know how many items are in any bin.

A bin card shows:

1 The receipts - as recorded from:

a) Goods received notes
b) Goods returned to stores notes

2 The issues - as recorded from:

a) Materials requisition notes
b) Goods returned to supplier notes

3 The balance (level) after each receipt or issue.

Here's an example of what a bin card looks like.

BIN CARD

Shelf No. B42 Contents 5/16" Drill Bits

Bin No. 27

Stock Ledger No. 2656

Date	RECEIPTS		ISSUES		Balance
	Document Number	Quantity	Document Number	Quantity	
26.6.85	GRN 123	145			145

You'll see that on our example 145 items were received one morning. During the day 10 items were returned from a production department and a requisition note for 25 is received from another department.

Complete the balances in the bin card after the receipt of the extra delivery and after the surplus stock was returned from production.

The completed bin card should look like this and, as you see, we have a balance of 130 items at the end of the day.

BIN CARD

Shelf No. B42 Contents 5/16" Drill Bits

Bin No. 27

Stock Ledger No. 2656

Date	RECEIPTS		ISSUES		Balance
	Document Number	Quantity	Document Number	Quantity	
26.6.85	GRN 123	145			145
26.6.85	RTN 005	10			155
26.6.85			MRN 456	25	130

The information about the 10 returned items was taken from the goods returned note and the information about the 25 issued from a materials requisition note.

You can see that if anybody misses out an entry the balance shown on the bin card will be wrong and the error will be carried forward until the stock is physically counted.

Everyone relies on the accuracy of the bin card so it's the responsibility of everybody in the workplace to make sure that:

there's a document for every receipt

there's a document for every issue

every receipt and issue is entered on the bin card

The bin cards will tell us how many items there are in each bin but we still need to know how much stock we are holding in total. For this purpose, we usually keep:

A STOCK LEDGER

The stock ledger is often kept separate from the stores, either by the Purchasing department or the Accounts Department.

However, a copy of the stock ledger may be kept in the stores so that the stores supervisor can have all the information available about the stocks for which he is responsible but, as we shall see, it is more likely that a summary only will be kept in the stores.

We can think of the stock ledger as a complete set of bin cards but with a lot more information.

Perhaps the most important additional piece of information kept in the stock ledger is:

The COST PRICE of the contents of each bin or group of bins

The VALUE of the stocks held.

This information is often quite confidential and only available to the stores supervisor and not to his staff.

ACTIVITY 25
Time guide
2 mins

Why do you think the value of stocks held is confidential information?

* _____

The information is kept confidential to reduce the risk of pilferage or theft. Knowing that certain materials are very valuable might be too much of a temptation to some people.

In addition to the price and value, other important information is recorded in the stock ledger:

the supplier's name

maximum stock level

minimum stock level

re-order level

re-order quantity

We shall be looking at how this additional information is used in Part C.

The stock ledger is kept up-to-date in exactly the same way as the bin cards, by entering the details from the documents recording receipts and issues.

The other difference between the stock ledger and the bin cards is that the stock ledger contains details of every type of material and part held and is complete. Any authorised person can find the current level of any stock item by looking up the record for the item required.

Many items will be kept in more than one bin, so only by adding together the totals of all the bin cards can the total of any particular item be worked out.

The stock ledger will show not only the total number of items in stock, their price and their value but also the bin and shelf numbers containing the items.

We agreed at the beginning of this unit that one of the most important aspects of a stores records is that they should tell us

exactly what is in stock at any time

how much of any particular item is in stock

ACTIVITY 26
Time guide
5 mins

How would you go about finding out how many drums of machine lubricating oil there are in stock at the moment assuming that it is kept in several locations in the workplace?

* _____

_____

I hope we can agree that firstly you would look in the stock ledger for the reference - machine lubricating oil - to find the total balance in stock.

The stock ledger would tell you the bin and shelf numbers so that, if necessary, you could also go and physically count them.

If any goods received notes, returns notes or materials requisition notes had not been entered on either the bin card or the stock ledger then the actual number of drums in the bin will not agree with the balance shown on the bin card or stock ledger.

As you can see, it is of the utmost importance that all the receipt and issue documents are entered on to both the bin cards and the stock ledger.

Clearly, there is a lot of work involved in keeping all these records up to date. So it is usual to find that

Bin cards - are written up by the stores personnel

Stock ledger - is written up in the purchasing department or accounts department.

It is not necessary for the stores personnel to have a complete copy of the stock ledger, so it is also very common to give them a weekly stock summary which we'll look at in Part C. A standard computer package can also make life a lot easier, providing everybody who needs it with all the information on stock levels and costs.

5 Stocktaking

Although we must rely on the accuracy of the documentation to ensure that we know what we have in stock at any time, there is only one way to be sure of what we've got.

ACTIVITY 27
Time guide
1 min

Jot down the only sure way of finding out what you've got in stock.

* _____

I hope we can agree that the only sure way is to get out and count it. It would be nice if there was time enough to count all the stock every week or even every month.

But if we did this, there would be no time to carry out all the other work associated with keeping the stores efficient or else we would need a large staff of helpers.

So what is the answer?

Perhaps one of the best methods is a compromise:

To count all the stock completely at least once every year (usually at the end of the financial year and half year)

and

To check a few bins in detail every week

During the year, every bin will be checked at least two or three times

This technique is called:

PERPETUAL INVENTORY OR CONTINUOUS STOCKTAKE

ACTIVITY 28
Time guide
2 mins

Jot down two of the benefits of this method of stocktaking.

* _____

* _____

The two main advantages are that it enables you to keep records up-to-date and accurate if you physically match the records and the actual stock occasionally and that it provides a check on damage, loss, theft and pilferage.

In order to control this task you need a plan to check a different set of shelves and bins each month.

ACTIVITY 29
Time guide
2 mins

If your aim is to prevent theft and pilferage, what will be an important feature of your plan?

Jot down one suggestion.

* _____

You may well have written that the plan must be confidential but, perhaps more importantly, it must be irregular. If your checking follows a regular pattern, a dishonest employee might wait until just after the bins have been checked before stealing goods.

EXTENSION 2
page 69

If you need to know more about a complete mathematical system for keeping perpetual inventory you might like to take up this extension.

Responsibility for organising stocktaking, both continuous and the full check once or twice a year, is usually shared by the stores supervisor and managers from the purchasing and accounts departments.

ACTIVITY 30
Time guide
5 mins

A full stock check is always hard work.

Jot down three things connected with stores records which will make it easier.

* _____

* _____

* _____

I hope we can agree that the work involved in the full stock check will be very easier if:

* the bin cards have been kept up-to-date

* the stock ledger has been kept up-to-date

* copies of all the documents have been filed in numerical order:

  goods received notes
  goods returned to stores notes
  materials requisition notes
  goods returned to supplier notes

* the bin cards and the stock ledger show the document serial numbers of all the entries

* there has been a system of perpetual inventory in force during the period since the last stock check.

EXTENSION 3
page 69

Although we've talked about stores documentation in general terms there's no substitute for asking somebody at your own workplace to show you how the whole system works there in each of the departments concerned.

SELF CHECK 7
Time guide
5 mins

1 Respond by answering TRUE or FALSE to the following statements.

a) There will only be one bin card for each material or part. _____

b) The total number of items in stock will be shown in the stock ledger. _____

c) With perpetual inventory all stocks will be checked only once every year. _____

d) Accurate stock levels depend upon keeping the records up-to-date. _____

e) Stocktaking reduces losses by theft or pilferage. _____

2 Complete the following statements with a suitable word or words.

Correct stores records depend upon:

Careful and accurate _____.

_____ entry of documents on to _____ and _____.

Perpetual _____.

Enquiry into any _____.

Co-operation between those working in:

Stores

_____

Production and service departments

_____.

The answer to this self check is here in the following words so you will need to check out your answers carefully. 1 a) There could be several bins, all containing the same type of materials so this statement is false. b) Only the stock ledger shows the overall totals of materials held in stock so this statement is true. c) Each bin should be checked at least two or three times every year so this statement is false. A full stock check should take place at least once a year. d) Only if all the documents are entered onto the bin cards and stock ledger can the balances shown be accurate so this statement is true. e) We cannot completely stop losses by theft or pilferage but regular stock checks will keep this to the minimum by drawing attention to any discrepancies so this statement is true. 2 Here is how I would complete that list of conditions for correct stores records. Words which mean the same would be equally suitable. Correct stores records depend upon: careful and accurate documentation; speedy entry of documents on to bin cards and stock ledger; perpetual inventory; enquiry into any differences or discrepancies; cooperation between those working in stores, purchasing, production and service departments, accounts.

6 Summary

* Stores records

Receipt of goods	- GOODS RECEIVED NOTES
	- GOODS RETURNED TO STORES NOTES
Issue of goods	- MATERIALS REQUISITION NOTES
	- GOODS RETURNED TO SUPPLIER NOTES
Receipts, issues and balance in individual bins	- BIN CARDS
Full record of all stock entries and balances	- STOCK LEDGER
An occasional check on selected bins to match up records and actual amounts	- PERPETUAL INVENTORY
A regular (yearly at least) check of all stocks and records	- FULL STOCKTAKING

Everybody is responsible for ensuring that all records are up-to-date and accurate.

PART C KEEPING EVERYTHING MOVING

1 Introduction

So far we have been concerned with the work done in the stores by the stores supervisor and the stores workteam.

The responsibility for keeping the documentation and records up to date belongs to them, but in many cases they must rely on other people and other departments to help them.

In this part of the unit we shall be looking at the parts played by other departments in the overall stores records function, particularly the roles of purchasing, production and service departments.

Since the stores play a vital role in the efficiency of any manufacturing or retailing company, it is essential that everyone should co-operate to make sure that everything is done to keep the stores records as accurate and up-to-date as possible.

In particular we will be concerned with:

* the role of the purchasing department in ensuring that there is an adequate supply of materials and parts into the stores
* the role of the production and service departments in providing enough information to the stores supervisor on their future requirements
* what can be done by stores and production personnel to reduce waste and losses to an absolute minimum.

2 Re-Ordering

Unless there is an effective system for replenishing stocks as they are used, there will soon be a situation when the stores run out of stock.

This situation is BAD NEWS.

ACTIVITY 31
Time guide
5 mins

Jot down why you think running out of stock is bad news for:

* the production department
* the stores
* the company as a whole
* _____
* _____

Well, if there are no materials or parts left in the stores when they are needed:

* production of the company's products would grind to a halt. The employees may have to be laid off or even worse.

* the stores would lose its goodwill as a department which exists only to serve its colleagues in the company.

* the company as a whole could suffer because of its inability to meet orders. Its customers may cancel their orders and go to a competitor, which in the long run means that everyone employed in the company could lose their jobs.

So we can see that keeping adequate stock levels is important to everyone in the company.

To put it very simply:

AS SOON AS STOCKS RUN LOW, WE MUST RE-ORDER

BUT

How do we know when stocks are running low?

How low is 'low'?

Who is responsible for re-ordering?

Let us look at these questions, one at a time:

2.1 Knowing when stocks are low

ACTIVITY 32
Time guide
3 mins

Bearing in mind what we've said so far in this unit, jot down three ways in which we could tell if stocks were running low.

* _____

* _____

* _____

I hope we can agree that there are three ways we can tell that stocks are running low:

- by looking on the shelves and in the bins

- by looking at the balances on the bin cards

- by looking at the balances on the stock ledger.

Each of these methods means that someone has continually to examine the shelves, bins, bin cards and stock ledger. This will involve a lot of valuable time and effort so we need to look for an easier method.

It is not the job of the stores supervisor to re-order any materials which are running low - this must be done by the purchasing department.

ACTIVITY 33
Time guide
1 min

Jot down one reason why purchasing should re-order goods rather than the stores supervisor.

* _____

There are all sorts of reasons why it might be better for purchasing to re-order goods. (If you are a hard-pressed stores supervisor you may just think the main reason is that you don't have time!) However, the reasons I would give are:

* purchasing are able to find out about what various suppliers can offer and select the best deal

* because they may be buying for the whole company, purchasing are likely to be able to negotiate special discounts

* purchasing are likely to have up-to-date information on how long various suppliers will take to deliver.

Purchasing can't operate efficiently, though, unless they receive information from stores about which items are running low in time for them to re-order before existing stocks run out.

To provide this information we need to set a

RE-ORDER LEVEL

for every type of material or part. The re-order level is the number you need to have to ensure that, as long as an order is placed immediately, there is no danger of running out of stock.

Let me show you what I mean with this example.

ACTIVITY 34
Time guide
2 mins

Suppose we use five drums of lubricating oil every week and the supplier takes three weeks to deliver.

What is the minimum number of drums we should have in stock when we place a new order?

*

We must have at least fifteen drums to see us through the three week waiting period for a new order to be delivered, so the response to this activity was 15.

The time taken between placing an order and delivery is called

LEAD TIME.

The emergency levels (the fifteen drums of oil we need, given a lead time of three weeks in the example we've just looked at) are called

SAFETY STOCK.

You may well have thought that, in practice, you would set your re-order level a bit higher than this in case of any emergencies or any unforeseen circumstances so perhaps 20 is a more realistic figure.

The re-order level, say 20 in this case, is entered on the bin cards and stock ledger and, as soon as the balance falls to the re-order level, a new order is prepared.

SELF CHECK 8
Time guide
5 mins

If the weekly use of a particular component has been 20 units per week and it takes 2 weeks for the supplier to deliver an order; what would you consider to be a reasonable re-order level?

You may assume that an emergency stock of 10 units is always kept.

*

The answer to this self check is here in the following words, so you'll need to check out your answers carefully. The re-order level would be calculated as follows: 2 weeks consumption = (2 x 20 units) = 40 units. Add the emergency stock - 10 units. Re-order level = 50 units.

2.2 Deciding What is Low

The second of our questions was:

How low is 'low'?

Well, as we have just seen, it depends upon three things:

* the normal rate of usage per week
* the time it takes for the supplier to deliver
* the amount of the emergency stock which everyone considers necessary.

These figures will be different for each type of stock, so we cannot make any general rules but we can set a re-order level for each item which will ensure that stocks never run 'too low'.

2.3 Responsibility for re-ordering

The third of our questions was:

Who is responsible?

We can answer this question in two ways.

Everyone is responsible for alerting purchasing to the need to re-order

but

only purchasing should raise purchase orders actually to buy materials.

ACTIVITY 35
Time guide
2 mins

Jot down one possible unfortunate outcome of purchase orders being placed by departments other than purchasing.

* _____

_____

_____

If purchase orders aren't made and checked by one department, Purchasing, there is a risk that two orders may be raised for the same thing or that everyone will assume that somebody else is doing it and no order will be raised at all.

When we were talking about documentation, we mentioned stores' responsibility to send copies of goods received notes and returns notes to other departments concerned.

ACTIVITY 36
Time guide
3 mins

Who have purchasing a responsibility to inform when they place a purchase order.

Jot down at least two departments to whom they should send a copy order.

* _____

* _____

What you say in response to this activity may, to some extent, reflect your experience in your own workplace. However, the departments I would suggest are:

* Stores - to let the supervisor know to expect a delivery (when the goods arrive the goods received note is checked against the copy order).

* Production - to let the production supervisor know that the materials needed for his schedules are on order.

* Accounts - to enable them to check the invoice (the bill from the supplier) against the original order.

3 Keeeping up with demand

We've just seen that re-ordering efficiently depends on knowing the regular needs of production and service departments - information which those departments have to supply to purchasing and stores so that realistic re-order levels can be set.

It's also important that production and service departments give advance warning of any changes in their need for materials and parts whenever they can.

To show you what I mean, let's go back to our drum of lubricating oil which we've mentioned before. You remember before we said that, if oil was used at five drums a week and the supplier took three weeks to deliver, we would need a re-order level of twenty drums, allowing for an emergency stock.

But suppose there is a rush of orders and extra shifts have been put on. There has been a 40% increase in machine use and a corresponding increase in the use of lubricating oil.

ACTIVITY 37
Time guide
5 mins

Jot down what you think the re-order level for lubricating oil should be now.

*

If use has increased by 40% you will use seven drums a week rather than five.

The supplier's delivery time won't have changed so you still need to have sufficient stock for three weeks and emergency stocks when you re-order. Don't forget that emergency stocks will need to be increased too - perhaps to somewhere between seven and nine drums. (I'll opt for nine in my calculations.)

So the new re-order level should be:

(3 x 7) + 9 = 30

Clearly, if you don't change the re-order level on the bin cards and stock ledger then the stores may run out of lubricating oil before fresh supplies have been delivered.

Similarly, if the need for a particular material is reduced, then the re-order level figure needs to be lowered.

ACTIVITY 38
Time guide
2 mins

Jot down one unfortunate result of not lowering the re-order level of materials for which demand is reduced.

*

There are two main reasons why stocking materials which you don't really need is bad news for the company.

* money is tied up unnecessarily in materials which you don't need or may not need for some time

* valuable shelf space is used unnecessarily. It could probably be put to better use storing materials which are currently needed.

4 "Buffer" Stocks

Of course, it's not always possible to predict much in advance when you are going to need extra materials. It's an understandable reaction to feel that you need some supplies of important materials in your own work area within you own control to help you 'ride' the minor changes in demand that occur in most jobs.

Some companies may decide this is necessary and desirable (or it may be done without managers ever knowing) but there are several disadvantages to this practice.

ACTIVITY 39
Time guide
3 mins

It doesn't matter what your job is.

Think of one item which you might like to have, or do have supplies of, in your own work area in excess of what you immediately need.

Jot down two of the disadvantages of this to the company as a whole.

* _____

* _____

The more you think about this the more disadvantages spring to mind. Here are a few of them.

* Materials clutter up the workplace unnecessarily and may even form a hazard

* There is very little control over materials lying around in the workplace and a greater risk of damage or theft than if they are kept in the stores

* There may be little collections of stock dotted about throughout the workplace. Nobody really knows how much there is or how much money is tied up in stock.

* Whether or not the materials are actually used by the department which is keeping them, they will still be charged to that department. If they're not actually being used, the department's costs will be over-stated.

SELF CHECK 9 Respond by completing each sentence with a suitable word or words.
Time guide
5 mins

a) Every bin card should show the _____ level in a prominent place.

b) The only department which should be allowed to place an order for goods should be _____.

c) A copy of the _____ should be sent to the stores supervisor and the production supervisors and accounts.

d) Any increase in the need for any particular material or part should result in _____ in the re-order level.

e) If no changes are made to the re-order levels the results could be either _____ _____ or of _____.

The answer to this self check is here in the following words, so you'll need to check out your answers carefully. a) Every bin card should show the re-order level. b) It's Purchasing which should place purchase orders because they should be able to negotiate the best deal for the company. c) Purchasing should send a copy of the purchase order (or you may just have said 'order') to other departments which need to know about it. d) If the need for materials increases then re-order levels should be increased; if the need decreases then re-order levels should be lowered. e) Otherwise you run the risk of either running out of stock or of over-stocking.

5 Summary

RE-ORDER LEVELS
- should be clearly entered on bin cards and the stock ledger
- are calculated by multiplying the weekly usage by the number of weeks needed to deliver and adding an allowance for emergency stocks
- are the responsibility of everybody to monitor

But only PURCHASING should raise purchase orders. To do so efficiently they need information from user departments on changes (increases and decreases) in their requirements.

BUFFER STOCKS
- can lead to loss, theft, damage and loss of proper control of stock levels.

PART D KEEPING CONTROL

1 Introduction

So far, we have looked at the contribution to stores records made by:

the stores supervisor and the stores workteam

the supervisors from the production and service departments

the Purchasing and Accounts departments.

Each has had a special role to play in ensuring that the supply of materials and parts runs as smoothly as possible.

However, before we finish, there are one or two loose ends to tie up. These concern everyone and are matters which require the co-operation of everyone concerned.

Although we looked at re-ordering in some detail, we did not go into questions such as

What is the maximum stock level for any particular item?

What is the minimum stock level for any item (although we did mention 'emergency' stocks) and how do we determine it?

Neither did we decide how to deal with a situation when the stock levels we discover when we hold a stock-taking do not agree with the balances on the bin cards or stock ledger. We will deal with these matters now.

2 Maximums and Minimums

If we ask the question:

"What should the maximum stock level be"

for any particular item, we're likely to get a different answer each time depending on who we're talking to. For example, from a production supervisor we might hear,

"Enough to make sure we never run out whatever happens. Remember, production schedules may have to be changed at quite short notice."

A stores supervisor might think,

"We need to operate first-in, first-out. I don't want so much in stock that we never manage to use up the older stock".

A stores assistant who actually has to find a space and store goods in it might be more concerned simply with where it's all going to go:

> "We need enough not to run out but not so much that we're cluttered up and there's no room for any new goods."

Each of these people has a point, though they don't represent the whole picture. To agree maximum stock levels which suit everybody they need to sit down with somebody from Purchasing and Accounts and work out a compromise between them.

ACTIVITY 40
Time guide
5 mins

Suppose that's the situation.

Representatives from Production, Stores, Purchasing and Accounts have met to discuss and agree maximum stock levels.

Jot down four considerations which they will have to take into account in their discussions.

* _____
* _____
* _____
* _____

The list of considerations could be quite long but here are what I think are the major ones.

* the available storage space and how to make use of it
* the risk of damage, deterioration and loss by theft of keeping various amounts
* the cost to the company of buying large amounts of materials which may never be used

or

* the cost of frequently re-ordering relatively small amounts
* the rate at which any particular material or part is used
* seasonal variations in demand for the company's products
* how easy it is to replace stock and how long it will take to deliver.

Once they've agreed on a figure then everyone must stick to it until they are all agreed to change it. A similar discussion needs to take place about minimum stock levels. Here, perhaps, it's even more important that everyone should agree on the figure and it's certainly important, as we saw in PART C, that they should stick to the agreement and inform the others about any changes in the usual situation. The minimum level is the lowest possible level you should have without danger of running out. It's not the same as the re-order level. You should re-order when further issues will only reduce your stock to a safe minimum before another delivery is received. However, everybody's view of the appropriate minimum stock level will vary too.

The production supervisor is likely to think,

> "All I care about is that the stuff is there. I never want to have to stop production because of a stock out."

The stores supervisor is aiming for,

> "Just enough to last us until the next order is delivered."

Somebody working in the stores might feel,

> "We don't want to keep too much stock, otherwise we'll be snowed under. On the other hand, deliveries are sometimes late and sometimes there's been a mistake and the order hasn't been placed when it should so perhaps we need to keep a bit ..."

Once again, they've all got a point. It's only by sitting down together and dealing with each type of material and part separately that a reasonable minimum stock level can be worked out.

EXTENSIONS 4 and 5 page 69

You may find that such discussions broaden out to cover ways of keeping down costs more generally and ensuring that the whole system in your workplace is geared to making the most effective use of all your resources. If you are thinking along these lines you might like to take up these extensions.

You might well be thinking that there aren't enough hours in the day to decide what the maximum and minimum stock levels for every item in stock should be so that the points at which to re-order can be determined.

In practice, if you can forecast how many finished goods or what particular service you are planning to provide to customers in a given forthcoming period, then the quantities of components and materials can be adjusted accordingly: you don't have to sit down and work out each item separately.

Nevertheless, using any manual system such as we've described, you will find it very difficult to adapt to the frequent ups-and-downs in production that many businesses experience and determining stock levels will always contain an element of guesswork.

ACTIVITY 41
Time guide
2 mins

Controlling a business's stock position involves carrying out calculations relating to an enormous number of different items. Ideally these calculations should be checked each time there is a change in the stock position. What equipment can effectively do this?

*

I hope you felt that this detailed monitoring of stock and adjustment of re-order levels is exactly the sort of job which a computer can perform. It can perform the calculations far more rapidly than stores clerks or purchasing and planning clerks can and can repeat them at far more freqent intervals.

Computer programs to help with stores control range from the relatively simple which will keep a record of all stock movements and transactions and provide a reminder when re-order levels are reached to the very sophisticated which, as well as monitoring the stock position, continually up-date re-order levels and re-order quantities and actually produce the orders to suppliers, ready typed-out, as and when they are needed.

However, as with any other computer application, the information you get out is only as good as the data you provide in the first place so all that we have said about

recording all stock transactions

informing of any likely changes in use

co-operation between departments concerned

is as important as ever, no matter how sophisticated the computer program.

SELF CHECK 10 Respond by answering TRUE or FALSE to the following statements.
Time guide
5 mins

a) It is safer to keep too much stock than too little. _____

b) The Purchasing Manager should decide the maximum and minimum stock levels. _____

c) The re-order level will be higher than the minimum level. _____

d) The emergency stock level is the same as the minimum level. _____

The answers to this self check are here in the following words, so you'll need to check out your answers carefully. a) It is certainly true that it is safer to hold too much stock, but it may not always be economic or practical. b) Everyone concerned with materials and parts should discuss and agree on maximum and minimum levels so this statement is false. c) True. The re-order level should be calculated so that further issues only reduce the level to minimum before the order is delivered. d) Although this may be true in some cases, the 'emergency' stock will be slightly less than the normal 'minimum' stock level so this statement is false.

3 Shortages

Finally, let's look at what we should do when we count the number of items in the bins and discover that there are fewer there than the balance shown on the bin cards or stock ledger.

You hope this won't happen since the whole purpose of stores documentation is to avoid your having to physically count up items to be sure of what you've got. However, inevitably, since we're all human, mistakes sometimes occur.

ACTIVITY 42
Time guide
5 mins

There are several reasons why the number of items in the bins could be different from the totals on the bin cards or stock ledger. Write down any FOUR reasons you can think of.

* _____

* _____

* _____

* _____

Here are a list of some of the reasons which you may have thought of:

* Goods have been issued without a materials requisition note

* Goods have been returned to the supplier without being recorded on a returns note

* Some materials requisition notes or goods returns notes have not been entered on the bin cards or stock ledger

* Goods have been received for which there is no goods received note

* Goods have been returned to the store from the shop floor without a goods returns note

* Some goods received notes or goods returns notes have not been entered on the bin cards or stock ledger

* Any of the above documents have been mislaid or lost

* Goods have been stolen from the store

* Damaged goods have been scrapped without any record

* Mistakes have been made by persons counting the stock

* Stock have been kept on the shop floor by the supervisor and have not been counted along with everything else.

As you can see, there could be any number of reasons for a shortage in stock. We must not jump to the conclusion that someone is stealing the goods: it is more likely to be a fault in the paperwork.

So what can we do about shortages?

Obviously, the first thing to do is to check that all goods received notes, returns notes and materials requisitions have been entered on the bin cards and stock ledger.

The second thing would be to check that there were no missing documents.

ACTIVITY 43
Time guide
5 mins

Jot down how we will be able to find out if any documents are missing.

* _____

Well, you'll remember that every document had a serial number which had been pre-printed on the forms before they are used.

When the forms have been filled in and then entered on the bin cards and stock ledger, the copy of each form which is kept by the stores supervisor can be filed in serial number order.

This way, it is easy to spot a missing number and to make enquiries.

It is very difficult to stop losses by pilferage and theft. It would require a large staff of security personnel to do this but, if the store is kept secure and someone is on duty at all times, then the risks of loss will be reduced.

But what do we do if, after checking every document, there is still a shortage?

ACTIVITY 44
Time guide
2 mins

Which would you think is a better way of dealing with the shortage?

Tick whichever seems to you the right course of action.

* Alter the bin cards and stock ledger to show the actual number of items left

* Keep the records unaltered but make a separate note that the actual quantity is lower than shown.

I hope we can agree that you have to alter the records. It's important that bin cards and stock ledger show as near to the correct figure as possible and are an accurate record of the stock position.

When the records are altered the items unaccounted for are 'written off' and it's important that the Accounts Department are informed so that they can calculate the cost of the shortages for their records.

4 Summary

Maximum and minimum stock levels have to be determined by discussion and agreement between:

Stores

Production

Purchasing

Accounts

Although computers can make stores records more accurate and sophisticated, how reliable they are still depends on cooperation between departments concerned.

Shortages in stock are usually the result of paperwork errors.

To check out a shortage:

Check that all documents have been entered on to bin cards and the stock ledger.

Check that there are no missing documents.

Amend the records to show the corect stock figures shown by the stock-take.

Inform the Accounts department of the difference written off.

PART E PERFORMANCE CHECKS

1 End Check

Time guide 60 mins

You may review your understanding of this unit as a whole by completing this group of questions. DON'T GUESS THE ANSWERS - if you're not sure, flick back into the unit and check before responding.

If you are still unsure then put a question mark against your response before proceeding.

TRUE/FALSE

Respond to each statement by writing TRUE or FALSE in the space provided.

1 There will be one bin card for each type of material. _____

2 There should be a lot of clear space between rows of shelves. _____

3 All receipts into stores will be recorded on goods received notes. _____

4 Every document should be signed by someone of supervisory level. _____

5 Bin cards will show the value of materials in stock. _____

6 Perpetual inventory means goods that are obsolete and due for scrapping. _____

7 Re-order levels will be recorded on bin cards and stock ledger. _____

8 Supervisors should be encouraged to keep 'buffer' stocks on the shop floor. _____

COMPLETION

Respond by completing each sentence with a suitable word or words.

9 The practice of using up the oldest stock first is known as _____.

10 Each document can be identified by its _____.

11 There should be at least _____ copies of every stock document.

12 Each copy can be identified by its _____.

13 All orders for replacement of materials and parts must be made by _____.

14 Any damaged or obsolete goods removed from the stores must be recorded on _____.

15 Stock 'shortages' are usually caused by _____.

MULTIPLE CHOICE

Respond to each question by putting a mark against the ONE answer which is most correct.

16 A delivery of materials to the store would be recorded on:

a) Purchase order form

b) Requisition note

c) Goods received note

d) Shelf

17 Which of the following would be made out by a production supervisor?

a) Purchase order form

b) Materials requisition note

c) Goods received note

d) Scrap note

18 Which of the following items would ONLY be found on materials requisition notes?

a) Serial number

b) Quantity

c) Order number

d) Job or batch number

19 How often should stocks be counted each year?

a) Once

b) Two or three times

c) Every month

d) Every week

20 When should an order be placed for more stock?

a) When there is no stock left

b) At minimum stock level

c) At re-order level

d) When prices are low

21 Which of the following is the most likely cause of shortages?

a) Pilferage

b) Lost documents

c) Documents not entered on bin cards or stock ledger

d) Late deliveries

22 Which of the following is the most important aspect of stores records?

a) A tidy storage area

b) Accurate documentation

c) Perpetual inventory

d) Up-to-date stock ledger

23 Which of the following persons is responsible for the accuracy of the stores records?

a) The stores supervisor

b) Production department supervisors

c) The purchasing manager

d) The accountant

END CHECK - Checkout

Audio Tape Side 2 Time guide 35 mins

The answers and explanations for these End Checks are on Side 2 of our Audio Tape. Have you responses with you as you play this tape. As you listen you can check out how well you have done and make notes as you proceed.

2 Tutor Check

Time guide 60 mins

Read the following case incident, then deal with the accompanying questions.

Case Incident

We met George, Brian and Jimmy earlier in this unit. They all work for a medium-sized engineering works.

Some time has passed since the earlier case incident in Part A and many of the difficulties have been overcome but now there are new problems.

The company has just completed a full stocktaking for its year-end accounts and the provisional stock lists have just been completed. Brian, the assembly shop supervisor, is involved in clearing up the paperwork for a large contract for an important customer.

Jimmy: How do the stock sheets look? Are there many differences?

George: I can't understand this. These sheets show that there are hundreds of items missing. That cannot be right, I could accept a few shortages but nothing like this!

Jimmy: Surely no-one has been pinching anything from this store, we checked most of these items only a couple of months ago on the new perpetual inventory system you introduced. That was supposed to prevent this sort of thing.

George: I know, I just cannot understand it. There weren't any significant shortages then.

Brian: Can I check some of your records, George? I seem to be overcharged on this contract. I'm sure I didn't use all the materials that have been charged to me.

George: You made out material requisition notes for everything, so I'm sure that you won't find anything wrong with our records. Anyway, we have our own problems - there's a lot of stock missing on the stocktaking.

Brian: I hope you are not accusing me or my staff of taking your stock.

Jimmy: No, nothing like that. I think there is something wrong with the documents somewhere because everything was OK a couple of months ago.

Brian: By the way, there is a lot of stuff lying on the shop floor which we were using on that contract. I requisitioned it to avoid keep coming back here every day. Some of it will have to come back I suppose.

You only need to write ONE or TWO sentences against each question.

1) What are the most likely reasons for the differences between the stock records and the stock check?

2) Why could Brian's costs be overstated?

3) What instructions would you give to George and Jimmy to help them locate the differences?

4) What documents will be used to deal with the stock lying on the shop floor?

Send to Tutor

Now get your answers to your study tutor either by post or handing it over personally. You will receive your tutor's assessment and comment back through the post as soon as it can be managed.

3 Work Based Project

Time guide 60 mins

In this unit, we have described a standard range of the documents used to record stock transactions.

For this project you might find it useful to identify the exact range of documents which your own organisation are employing.

1) Collect and describe every document used by your company to record the movements of goods in and out.

2) Describe the procedure used to take stock and the procedure used to deal with any shortages revealed.

3) Determine how the re-order level for five different types of goods are calculated.

Send to Tutor

Now get your answers to your study tutor either by post or by handing it over personally. You will receive your tutor's assessment and comment back through the post as soon as can be managed.

PART F UNIT REVIEW

1 Return to objectives

Having completed your work on this unit let's review how you feel about each of our four opening objectives. I will repeat them here and add comment:

You should now be better able to:

* DESIGN AND ORGANISE THE LAYOUT OF A STORE FOR MAXIMUM EFFICIENCY

You may not ever be asked actually to design a store from scratch but you should be able to make suggestions for improvements or indicate where inefficiencies are occurring. Just because things have been done one way for a long time does not mean that they are the best way!

Now to our second objective:

You should be better able to:

* UNDERSTAND THE TYPES OF DOCUMENTATION ASSOCIATED WITH THE MOVEMENT OF GOODS THROUGHOUT THE STORES AND THROUGHOUT THE WORKPLACE

Of course, there can be very complex patterns of movements of materials and parts throughout the factory but you can now appreciate that everything can be made more controllable by keeping standard documents to record receipts and issues of materials and parts to and from the stores.

Our third objective:

You should be better able to:

* APPRECIATE THE BENEFITS TO YOURSELF, AS SUPERVISOR, AND TO THE WORKPLACE AS A WHOLE OF AN EFFECTIVE SYSTEM OF STORES CONTROL

Only with an effective system of stores control can we ensure a smooth flow of materials and parts to help us produce the goods or service we are there for. If this smooth flow is interrupted then everyone can suffer.

Our final objective:

You should be better able to:

* UNDERSTAND SOME OF THE TECHNIQUES USED TO CONTROL STOCK LEVELS THROUGHOUT THE WORKPLACE AND TAKE THE STEPS NECESSARY TO PREVENT LOSSES BY WASTAGE AND PILFERAGE

No matter which section of the workplace you are concerned with, you are likely to get involved with stocks and stock levels at some point. So, your new understanding of the techniques involved will be of benefit to yourself, your workteam and your employers.

I hope that the work you have done was enjoyable and useful enough to encourage you to continue in your studies.

2 Extensions

I recommend that you take up as many of these extensions as you can. They will further increase your understanding and interest. You will also be able to check out a number of the ideas that I mention in the unit. The extra time and effort will prove very worthwhile.

EXTENSION 1 Book: Design of Stock Control Systems and Records

Author: Peter Bailey and Gerard Tavernier

Publisher: Gower Press

Chapter 1, 2, 3 and 4 cover many of the topics dealt with in this unit, particularly chapter 3 which deals with colour coding for documents.

EXTENSION 2 Book: Problems of Stock and Storage

Publisher: ICI Ltd (Mathematics and Statistical Techniques for Industry)

Chapters 1, 2 and 4.

Chapter 1 deals with general principles of stock recording. Chapter 2 goes into detail on the calculation of ecomonic order quantities. Chapter 4 deals with buffer stocks.

EXTENSION 3 Your own company's stock recording system. Examine the documents used in your own organisation and compare them with those mentioned in this unit.

EXTENSION 4 Book: Choice Series of Self Learning Units 72: Cost Reduction

Author: R Holmes

Publisher: Northern Regional Management Centre

EXTENSION 5 Book: Choice Series of Self Learning Units 38: Value Analysis

Author: V Prabhu

Publisher: Northern Regional Management Centre

These extension opportunities can all be taken up via your Support Centre.

They will either have the materials or will arrange that you have access to the materials. However it may be more convenient to check out the materials with your Personnel or Training people at work - they may well give you access. There are other good reasons for approaching you own people, for example they will become aware of your interest and you can involve them in your development.

3 References

REFERENCE 1 Book: Scientific Inventory Control 2nd Edition

Author: C D Lewis

Publisher: Butterworth 1981

This reference can be taken up via your Support Centre. They will either have the materials or will arrange that you have access to the materials. However it may be more convenient to check out the materials with your Personnel or Training people at work - they may well give you access. There are other good reasons for approaching your own people, for example they will become more aware of your interest and you can involve them in your developement.

If you do wish to make use of this reference then don't think that you must read it right through. Just dip into it for a slightly wider treatment of the topic raised by the unit.

I should warn that the language and style of the writing is often difficult to cope with. So don't struggle with it too much. Do what I do when in difficulty, put the book on the shelf and find a better one!

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